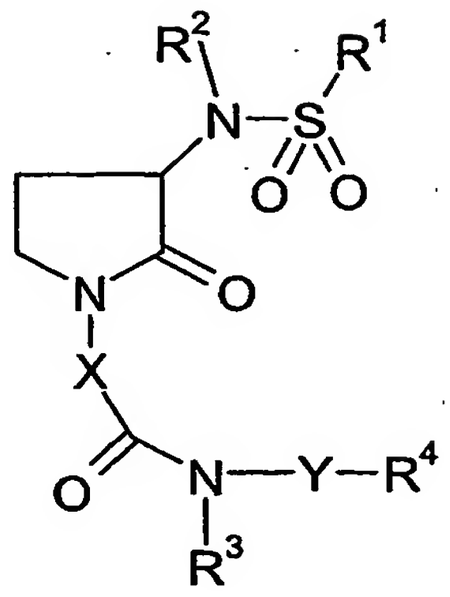
Claims

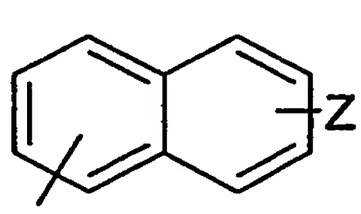
1. A compound of formula (I):

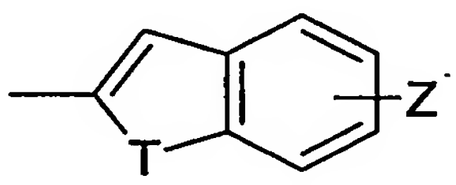


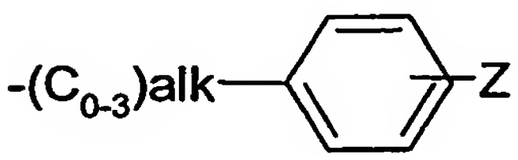
(I)

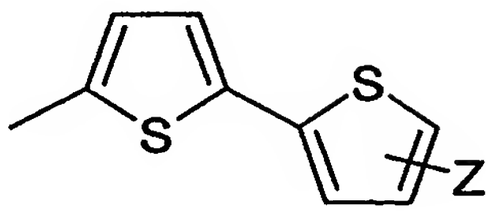
wherein:

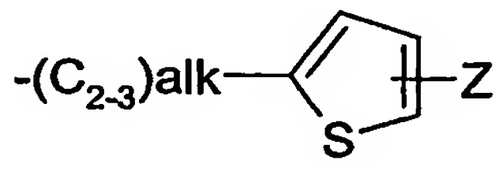
R^1 represents a group selected from:











each ring of which optionally contains a further heteroatom N,

Z represents an optional substituent halogen,

alk represents alkylene or alkenylene,

T represents S, O or NH;

R^2 represents hydrogen, $-C_{1-6}$alkyl, $-C_{1-3}$alkyl$CONR^aR^b$, $-C_{1-3}$alkylCO_2C_{1-4}alkyl, $-C_{2-3}$alkylmorpholino, $-CO_2C_{1-4}$alkyl, or $-C_{1-3}$alkylCO_2H;

R^a and R^b independently represent hydrogen, -C_{1-6}alkyl, or together with the N atom to which they are bonded form a 5-, 6- or 7- membered non-aromatic heterocyclic ring optionally containing an additional heteroatom selected from O, N or S, optionally substituted by -C_{1-4}alkyl, and optionally the S heteroatom is substituted by O, i.e. represents $S(O)_n$;

n represents 0-2;

X represents phenyl or a 5- or 6- membered aromatic heterocyclic group containing at least one heteroatom selected from O, N or S, each of which is optionally substituted by 0-2 groups selected from: halogen, -C_{1-4}alkyl, -C_{2-4}alkenyl, -CN, -CF_3, -NR^aR^b, -C_{0-4}alkylOR^e, -$C(O)R^f$ and -$C(O)NR^aR^b$;

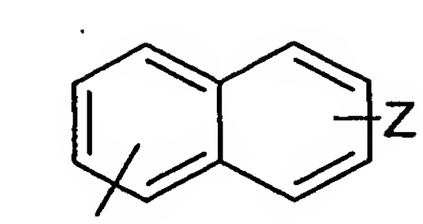
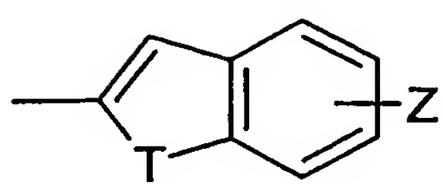
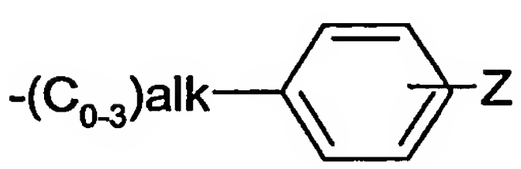
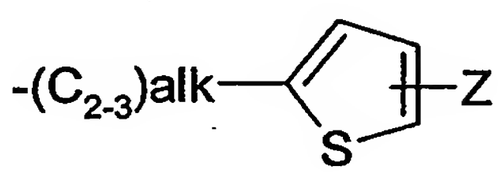
R^e represents hydrogen or -C_{1-6}alkyl;
R^f represents -C_{1-6}alkyl;
Y is absent or represents -C_{1-3} alkylene-;

R^3 represents hydrogen or -C_{1-6}alkyl;

R^4 represents -C_{3-4}alkenyl, -CH_2CH_2OH, -CH_2CO_2H, -$CH_2CH_2OC_{1-3}$alkyl, -$CH_2CH_2SO_2C_{1-3}$alkyl, -$CH_2CH_2NR^cR^d$, -$CH_2CONR^cR^d$, phenyl or a 5- or 6- membered aromatic or non-aromatic heterocyclic group containing at least one heteroatom selected from O, N or S and optionally substituted by -C_{1-4}alkyl;

R^c and R^d independently represent hydrogen, -C_{1-6}alkyl, or together with the N atom to which they are bonded form a 5-, 6- or 7- membered non-aromatic heterocyclic ring optionally containing an additional heteroatom selected from O, N or S, optionally substituted by -C_{1-4}alkyl;
and/or pharmaceutically acceptable derivative thereof.

2. A compound according to claim 1 wherein R^1 represents a group selected from:

each ring of which optionally contains a further heteroatom N,
Z represents an optional substituent halogen,
alk represents alkylene or alkenylene,
T represents S, O or NH;
and/or pharmaceutically acceptable derivative thereof.

3. A compound according to claim 1 or claim 2 wherein R^2 represents hydrogen and/or pharmaceutically acceptable derivative thereof.

4. A compound according to any one of claims 1-3 wherein X represents phenyl or a 5- or 6- membered aromatic heterocyclic group containing at least one heteroatom selected from O, N or S, each of which is optionally substituted by 0-2 groups selected from: halogen, $-C_{1-4}$alkyl or $-NR^aR^b$ and/or pharmaceutically acceptable derivative thereof.

5. A compound according to any one of claims 1-4 wherein Y is absent or represents C_{1-2} alkylene and/or pharmaceutically acceptable derivative thereof.

6. A compound according to any one of claims 1-5 wherein R^3 represents hydrogen or methyl and/or pharmaceutically acceptable derivative thereof.

7. A compound according to any one of claims 1-6 wherein R^4 represents $-C_{3-4}$alkenyl, $-CH_2CH_2OH$, $-CH_2CO_2H$, $-CH_2CH_2OCH_3$, $-CH_2CH_2SO_2CH_3$, $-CH_2CH_2NR^cR^d$, $-CH_2CONR^cR^d$, phenyl or a 5- or 6- membered aromatic heterocyclic group containing one or two heteroatoms selected from O, N or S and optionally substituted by $-C_{1-4}$alkyl and/or pharmaceutically acceptable derivative thereof.

8. A compound according to claim 1 selected from:
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(methylamino)ethyl]benzamide;

4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-(2-hydroxyethyl)-*N*-methylbenzamide;
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-(2-pyridinylmethyl)benzamide;
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(methylsulfonyl)ethyl]benzamide;
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(methyloxy)ethyl]benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(3-pyridinyl)ethyl]benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-(2-phenylethyl)benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-(4-pyridinylmethyl)benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-(3-pyridinylmethyl)benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-(2-hydroxyethyl)-*N*-methylbenzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-(phenylmethyl)benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(methyloxy)ethyl]benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-*N*-[2-(dimethylamino)ethyl]-3-fluoro-*N*-methylbenzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(methylsulfonyl)ethyl]benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-2-propen-1-ylbenzamide;
N-(2-Amino-2-oxoethyl)-4-[3-({[(*E*)-2-(5-chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methylbenzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-(4-pyridinylmethyl)benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(1-pyrrolidinyl)ethyl]benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-[2-(1*H*-imidazol-4-yl)ethyl]-*N*-methylbenzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-(3-hydroxypropyl)-*N*-methylbenzamide;

4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[3-(methylamino)-3-oxopropyl]benzamide;
4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(4-methyl-1*H*-imidazol-5-yl)ethyl]benzamide;
N-({4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluorophenyl}carbonyl)-*N*-methylglycine;
N-({4-[3-({[(*E*)-2-(5-Chloro-2-thienyl)ethenyl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluorophenyl}carbonyl)glycine;
4-(3-{[(6-Chloro-1-benzothien-2-yl)sulfonyl]amino}-2-oxo-1-pyrrolidinyl)-*N*-[2-(dimethylamino)ethyl]-3-fluoro-*N*-methylbenzamide;
4-(3-{[(6-Chloro-1-benzothien-2-yl)sulfonyl]amino}-2-oxo-1-pyrrolidinyl)-3-fluoro-*N*-methyl-*N*-[2-(methylamino)ethyl]benzamide;
4-(3-{[(6-Chloro-1-benzothien-2-yl)sulfonyl]amino}-2-oxo-1-pyrrolidinyl)-3-fluoro-*N*-methyl-*N*-[2-(3-pyridinyl)ethyl]benzamide;
N-(2-Aminoethyl)-4-(3-{[(6-chloro-1-benzothien-2-yl)sulfonyl]amino}-2-oxo-1-pyrrolidinyl)-3-fluoro-*N*-methylbenzamide;
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-*N*-[2-(dimethylamino)ethyl]-3-fluoro-*N*-methylbenzamide;
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-methyl-*N*-[2-(3-pyridinyl)ethyl]benzamide;
4-[3-({[(1*E*)-2-(5-Chloro-2-thienyl)-1-propen-1-yl]sulfonyl}amino)-2-oxo-1-pyrrolidinyl]-3-fluoro-*N*-[2-(1*H*-imidazol-4-yl)ethyl]-*N*-methylbenzamide;
4-(3-{[(6-Chloro-2-naphthalenyl)sulfonyl]amino}-2-oxo-1-pyrrolidinyl)-3-fluoro-*N*-methyl-*N*-[2-(methylamino)ethyl]benzamide;
and/or pharmaceutically acceptable derivative thereof.

9. A compound according to any one of claims 1-8 and/or pharmaceutically acceptable derivative thereof for use in therapy.

10. A pharmaceutical composition comprising a compound according to any one of claims 1-8 and/or pharmaceutically acceptable derivative thereof together with a pharmaceutical carrier and/or excipient.

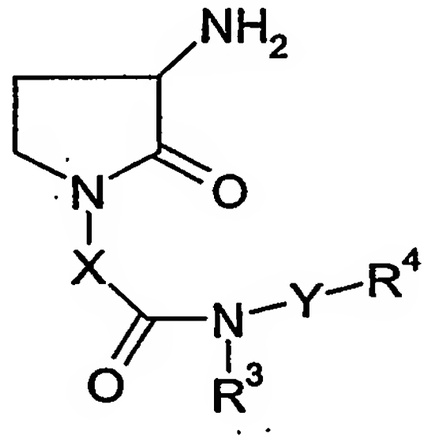
11. Use of a compound according to any one of claims 1-8 and/or pharmaceutically acceptable derivative thereof for the manufacture of a medicament for the treatment of a patient suffering from a condition susceptible to amelioration by a Factor Xa inhibitor.

12. A method of treating a patient suffering from a condition susceptible to amelioration by a Factor Xa inhibitor comprising administering a therapeutically effective amount of a

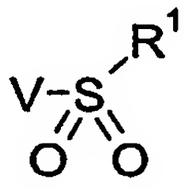
compound according to any one of claims 1-8 and/or pharmaceutically acceptable derivative thereof.

13. A process for preparing a compound of formula (I) which comprises:

(a) reacting compound of formula (II) or an acid addition salt thereof with a compound of formula (III) where V is a suitable leaving group:



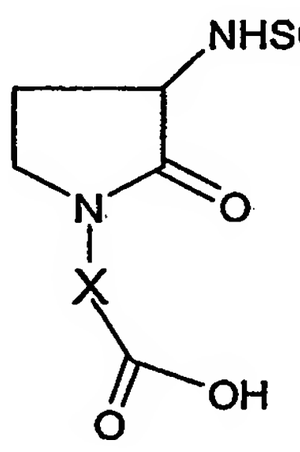
(II)



(III)

OR:

(b) by reacting compounds of formula (XIII) with compounds of formula (VI):



(XIII)

R^3 NHYR^4 (VI)

(c) by reacting a compound of formula (I) where R^2 is hydrogen with a compound of formula (XVII):

R^2—T (XVII)

where R^2 is -C_{1-6}alkyl, -C_{1-3}alkylCONR^{a}R^b, -C_{1-3}alkylCO_2C_{1-4}alkyl, -C_{2-3}alkylmorpholino or -CO_2C_{1-4}alkyl and T is a suitable leaving group, optionally followed by removal of the alkyl protecting group where appropriate.